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under section 14 of TSCA or part 2 of this title.

[61 FR 45813, Aug. 29, 1996, as amended at 64 FR 31098, June 9, 1999; 64 FR 42851, Aug. 6, 1999]

§ 745.227 Work practice standards for conducting lead-based paint activities: target housing and child-occupied facilities.

- (a) Effective date, applicability, and terms. (1) Beginning on March 1, 2000, all lead-based paint activities shall be performed pursuant to the work practice standards contained in this section.
- (2) When performing any lead-based paint activity described by the certified individual as an inspection, lead-hazard screen, risk assessment or abatement, a certified individual must perform that activity in compliance with the appropriate requirements below.
- (3) Documented methodologies that are appropriate for this section are found in the following: The U.S. Department of Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing; the EPA Guidance on Residential Lead-Based Paint, Lead-Contaminated Dust, and Lead-Contaminated Soil; the EPA Residential Sampling for Lead: Protocols for Dust and Soil Sampling (EPA report number 7474-R-95-001); Regulations, guidance, methods or protocols issued by States and Indian Tribes that have been authorized by EPA; and other eguivalent methods quidelines.
- (4) Clearance levels are appropriate for the purposes of this section may be found in the EPA Guidance on Residential Lead-Based Paint, Lead-Contaminated Dust, and Lead Contaminated Soil or other equivalent guidelines.
- (b) *Inspection*. (1) An inspection shall be conducted only by a person certified by EPA as an inspector or risk assessor and, if conducted, must be conducted according to the procedures in this paragraph.
- (2) When conducting an inspection, the following locations shall be selected according to documented methodologies and tested for the presence of lead-based paint:

- (i) In a residential dwelling and child-occupied facility, each component with a distinct painting history and each exterior component with a distinct painting history shall be tested for lead-based paint, except those components that the inspector or risk assessor determines to have been replaced after 1978, or to not contain lead-based paint; and
- (ii) In a multi-family dwelling or child-occupied facility, each component with a distinct painting history in every common area, except those components that the inspector or risk assessor determines to have been replaced after 1978, or to not contain lead-based paint.
- (3) Paint shall be sampled in the following manner: (i) The analysis of paint to determine the presence of lead shall be conducted using documented methodologies which incorporate adequate quality control procedures; and/ or
- (ii) All collected paint chip samples shall be analyzed according to paragraph (f) of this section to determine if they contain detectable levels of lead that can be quantified numerically.
- (4) The certified inspector or risk assessor shall prepare an inspection report which shall include the following information:
 - (i) Date of each inspection.
 - (ii) Address of building.
 - (iii) Date of construction.
- (iv) Apartment numbers (if applicable).
- (v) Name, address, and telephone number of the owner or owners of each residential dwelling or child-occupied facility.
- (vi) Name, signature, and certification number of each certified inspector and/or risk assessor conducting testing.
- (vii) Name, address, and telephone number of the certified firm employing each inspector and/or risk assessor, if applicable.
- (viii) Each testing method and device and/or sampling procedure employed for paint analysis, including quality control data and, if used, the serial number of any x-ray fluorescence (XRF) device.

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- (ix) Specific locations of each painted component tested for the presence of lead-based paint.
- (x) The results of the inspection expressed in terms appropriate to the sampling method used.
- (c) Lead hazard screen. (1) A lead hazard screen shall be conducted only by a person certified by EPA as a risk assessor.
- (2) If conducted, a lead hazard screen shall be conducted as follows:
- (i) Background information regarding the physical characteristics of the residential dwelling or child-occupied facility and occupant use patterns that may cause lead-based paint exposure to one or more children age 6 years and under shall be collected.
- (ii) A visual inspection of the residential dwelling or child-occupied facility shall be conducted to:
- (A) Determine if any deteriorated paint is present, and
- (B) Locate at least two dust sampling locations.
- (iii) If deteriorated paint is present, each surface with deteriorated paint, which is determined, using documented methodologies, to be in poor condition and to have a distinct painting history, shall be tested for the presence of lead.
- (iv) In residential dwellings, two composite dust samples shall be collected, one from the floors and the other from the windows, in rooms, hallways or stairwells where one or more children, age 6 and under, are most likely to come in contact with dust.
- (v) In multi-family dwellings and child-occupied facilities, in addition to the floor and window samples required in paragraph (c)(1)(iii) of this section, the risk assessor shall also collect composite dust samples from common areas where one or more children, age 6 and under, are most likely to come into contact with dust.
- (3) Dust samples shall be collected and analyzed in the following manner:
- (i) All dust samples shall be taken using documented methodologies that incorporate adequate quality control procedures.
- (ii) All collected dust samples shall be analyzed according to paragraph (f) of this section to determine if they contain detectable levels of lead that can be quantified numerically.

- (4) Paint shall be sampled in the following manner: (i) The analysis of paint to determine the presence of lead shall be conducted using documented methodologies which incorporate adequate quality control procedures; and/or
- (ii) All collected paint chip samples shall be analyzed according to paragraph (f) of this section to determine if they contain detectable levels of lead that can be quantified numerically.
- (5) The risk assessor shall prepare a lead hazard screen report, which shall include the following information:
- (i) The information required in a risk assessment report as specified in paragraph (d) of this section, including paragraphs (d)(11)(i) through (d)(11)(xiv), and excluding paragraphs (d)(11)(xv) through (d)(11)(xviii) of this section. Additionally, any background information collected pursuant to paragraph (c)(2)(i) of this section shall be included in the risk assessment report; and
- (ii) Recommendations, if warranted, for a follow-up risk assessment, and as appropriate, any further actions.
- (d) *Risk assessment*. (1) A risk assessment shall be conducted only by a person certified by EPA as a risk assessor and, if conducted, must be conducted according to the procedures in this paragraph.
- (2) A visual inspection for risk assessment of the residential dwelling or child-occupied facility shall be undertaken to locate the existence of deteriorated paint, assess the extent and causes of the deterioration, and other potential lead-based paint hazards.
- (3) Background information regarding the physical characteristics of the residential dwelling or child-occupied facility and occupant use patterns that may cause lead-based paint exposure to one or more children age 6 years and under shall be collected.
- (4) Each surface with deteriorated paint, which is determined, using documented methodologies, to be in poor condition and to have a distinct painting history, shall be tested for the presence of lead. Each other surface determined, using documented methodologies, to be a potential lead-based paint hazard and having a distinct painting

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history, shall also be tested for the presence of lead.

- (5) In residential dwellings, dust samples (either composite or single-surface samples) from the window and floor shall be collected in all living areas where one or more children, age 6 and under, are most likely to come into contact with dust.
- (6) For multi-family dwellings and child-occupied facilities, the samples required in paragraph (d)(4) of this section shall be taken. In addition, window and floor dust samples (either composite or single-surface samples) shall be collected in the following locations:
- (i) Common areas adjacent to the sampled residential dwelling or childoccupied facility; and
- (ii) Other common areas in the building where the risk assessor determines that one or more children, age 6 and under, are likely to come into contact with dust.
- (7) For child-occupied facilities, window and floor dust samples (either composite or single-surface samples) shall be collected in each room, hallway or stairwell utilized by one or more children, age 6 and under, and in other common areas in the child-occupied facility where the risk assessor determines one or more children, age 6 and under, are likely to come into contact with dust.
- (8) Soil samples shall be collected and analyzed for lead concentrations in the following locations:
- (i) Exterior play areas where bare soil is present; and
- (ii) Dripline/foundation areas where bare soil is present.
- (9) Any paint, dust, or soil sampling or testing shall be conducted using documented methodologies that incorporate adequate quality control procedures.
- (10) Any collected paint chip, dust, or soil samples shall be analyzed according to paragraph (f) of this section to determine if they contain detectable levels of lead that can be quantified numerically.
- (11) The certified risk assessor shall prepare a risk assessment report which shall include the following information:
 - (i) Date of assessment.

- (ii) Address of each building.
- (iii) Date of construction of buildings.
- (iv) Apartment number (if applicable).
- (v) Name, address, and telephone number of each owner of each building.
- (vi) Name, signature, and certification of the certified risk assessor conducting the assessment.
- (vii) Name, address, and telephone number of the certified firm employing each certified risk assessor if applicable.
- (viii) Name, address, and telephone number of each recognized laboratory conducting analysis of collected samples.
 - (ix) Results of the visual inspection.
- (x) Testing method and sampling procedure for paint analysis employed.
- (xi) Specific locations of each painted component tested for the presence of lead.
- (xii) All data collected from on-site testing, including quality control data and, if used, the serial number of any XRF device.
- (xiii) All results of laboratory analysis on collected paint, soil, and dust samples.
 - (xiv) Any other sampling results.
- (xv) Any background information collected pursuant to paragraph (d)(3) of this section.
- (xvi) To the extent that they are used as part of the lead-based paint hazard determination, the results of any previous inspections or analyses for the presence of lead-based paint, or other assessments of lead-based paint-related hazards.
- (xvii) A description of the location, type, and severity of identified lead-based paint hazards and any other potential lead hazards.
- (xviii) A description of interim controls and/or abatement options for each identified lead-based paint hazard and a suggested prioritization for addressing each hazard. If the use of an encapsulant or enclosure is recommended, the report shall recommend a maintenance and monitoring schedule for the encapsulant or enclosure.
- (e) Abatement. (1) An abatement shall be conducted only by an individual certified by EPA, and if conducted, shall

be conducted according to the procedures in this paragraph.

- (2) A certified supervisor is required for each abatement project and shall be onsite during all work site preparation and during the post-abatement cleanup of work areas. At all other times when abatement activities are being conducted, the certified supervisor shall be onsite or available by telephone, pager or answering service, and able to be present at the work site in no more than 2 hours.
- (3) The certified supervisor and the certified firm employing that supervisor shall ensure that all abatement activities are conducted according to the requirements of this section and all other Federal, State and local requirements
- (4) Notification of the commencement of lead-based paint abatement activities in a residential dwelling or child-occupied facility or as a result of a Federal, State, or local order shall be given to EPA prior to the commencement of abatement activities. The procedure for this notification will be developed by EPA prior to August 31, 1998.
- (5) A written occupant protection plan shall be developed for all abatement projects and shall be prepared according to the following procedures:
- (i) The occupant protection plan shall be unique to each residential dwelling or child-occupied facility and be developed prior to the abatement. The occupant protection plan shall describe the measures and management procedures that will be taken during the abatement to protect the building occupants from exposure to any lead-based paint hazards.
- (ii) A certified supervisor or project designer shall prepare the occupant protection plan.
- (6) The work practices listed below shall be restricted during an abatement as follows:
- (i) Open-flame burning or torching of lead-based paint is prohibited;
- (ii) Machine sanding or grinding or abrasive blasting or sandblasting of lead-based paint is prohibited unless used with High Efficiency Particulate Air (HEPA) exhaust control which removes particles of 0.3 microns or larger

from the air at 99.97 percent or greater efficiency;

- (iii) Dry scraping of lead-based paint is permitted only in conjunction with heat guns or around electrical outlets or when treating defective paint spots totaling no more than 2 square feet in any one room, hallway or stairwell or totaling no more than 20 square feet on exterior surfaces; and
- (iv) Operating a heat gun on leadbased paint is permitted only at temperatures below 1100 degrees Fahrenheit.
- (7) If conducted, soil abatement shall be conducted in one of the following ways:
- (i) If soil is removed, the lead-contaminated soil shall be replaced with soil that is not lead-contaminated; or
- (ii) If soil is not removed, the lead-contaminated soil shall be permanently covered, as defined in §745.223.
- (8) The following post-abatement clearance procedures shall be performed only by a certified inspector or risk assessor:
- (i) Following an abatement, a visual inspection shall be performed to determine if deteriorated painted surfaces and/or visible amounts of dust, debris or residue are still present. If deteriorated painted surfaces or visible amounts of dust, debris or residue are present, these conditions must be eliminated prior to the continuation of the clearance procedures.
- (ii) Following the visual inspection and any post-abatement cleanup required by paragraph (e)(8)(i) of this section, clearance sampling for lead-contaminated dust shall be conducted Clearance sampling may be conducted by employing single-surface sampling or composite sampling techniques.

(iii) Dust samples for clearance purposes shall be taken using documented methodologies that incorporate adequate quality control procedures.

(iv) Dust samples for clearance purposes shall be taken a minimum of 1 hour after completion of final postabatement cleanup activities.

(v) The following post-abatement clearance activities shall be conducted as appropriate based upon the extent or manner of abatement activities conducted in or to the residential dwelling or child-occupied facility:

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- (A) After conducting an abatement with containment between abated and unabated areas, one dust sample shall be taken from one window (if available) and one dust sample shall be taken from the floor of no less than four rooms, hallways or stairwells within the containment area. In addition, one dust sample shall be taken from the floor outside the containment area. If there are less than four rooms, hallways or stairwells within the containment area, then all rooms, hallways or stairwells shall be sampled.
- (B) After conducting an abatement with no containment, two dust samples shall be taken from no less than four rooms, hallways or stairwells in the residential dwelling or child-occupied facility. One dust sample shall be taken from one window (if available) and one dust sample shall be taken from the floor of each room, hallway or stairwell selected. If there are less than four rooms, hallways or stairwells within the residential dwelling or child-occupied facility then all rooms, hallways or stairwells shall be sampled.
- (C) Following an exterior paint abatement, a visible inspection shall be conducted. All horizontal surfaces in the outdoor living area closest to the abated surface shall be found to be cleaned of visible dust and debris. In addition, a visual inspection shall be conducted to determine the presence of paint chips on the dripline or next to the foundation below any exterior surface abated. If paint chips are present, they must be removed from the site and properly disposed of, according to all applicable Federal, State and local requirements.
- (vi) The rooms, hallways or stairwells selected for sampling shall be selected according to documented methodologies.
- (vii) The certified inspector or risk assessor shall compare the residual lead level (as determined by the laboratory analysis) from each dust sample with applicable clearance levels for lead in dust on floors and windows. If the residual lead levels in a dust sample exceed the clearance levels, all the components represented by the failed sample shall be recleaned and retested until clearance levels are met.

- (9) In a multi-family dwelling with similarly constructed and maintained residential dwellings, random sampling for the purposes of clearance may be conducted provided:
- (i) The certified individuals who abate or clean the residential dwellings do not know which residential dwelling will be selected for the random sample.
- (ii) A sufficient number of residential dwellings are selected for dust sampling to provide a 95 percent level of confidence that no more than 5 percent or 50 of the residential dwellings (whichever is smaller) in the randomly sampled population exceed the appropriate clearance levels.
- (iii) The randomly selected residential dwellings shall be sampled and evaluated for clearance according to the procedures found in paragraph (e) (8) of this section.
- (10) An abatement report shall be prepared by a certified supervisor or project designer. The abatement report shall include the following information:
- (i) Start and completion dates of abatement.
- (ii) The name and address of each certified firm conducting the abatement and the name of each supervisor assigned to the abatement project.
- (iii) The occupant protection plan prepared pursuant to paragraph (e)(5) of this section.
- (iv) The name, address, and signature of each certified risk assessor or inspector conducting clearance sampling and the date of clearance testing.
- (v) The results of clearance testing and all soil analyses (if applicable) and the name of each recognized laboratory that conducted the analyses.
- (vi) A detailed written description of the abatement, including abatement methods used, locations of rooms and/ or components where abatement occurred, reason for selecting particular abatement methods for each component, and any suggested monitoring of encapsulants or enclosures.
- (f) Collection and laboratory analysis of samples. Any paint chip, dust, or soil samples collected pursuant to the work practice standards contained in this section shall be:

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- (1) Collected by persons certified by EPA as an inspector or risk assessor; and
- (2) Analyzed by a laboratory recognized by EPA pursuant to section 405(b) of TSCA as being capable of performing analyses for lead compounds in paint chip, dust, and soil samples.
- (g) Composite dust sampling. Composite dust sampling may only be conducted in the situations specified in paragraphs (c) through (e) of this section. If such sampling is conducted, the following conditions shall apply:
- (1) Composite dust samples shall consist of at least two subsamples;
- (2) Every component that is being tested shall be included in the sampling; and
- (3) Composite dust samples shall not consist of subsamples from more than one type of component.
- (h) Recordkeeping. All reports or plans required in this section shall be maintained by the certified firm or individual who prepared the report for no fewer than 3 years. The certified firm or individual also shall provide copies of these reports to the building owner who contracted for its services.
- [61 FR 45813, Aug. 29, 1996, as amended at 64 FR 42852, Aug. 6, 1999]
- §745.228 Accreditation of training programs: public and commercial buildings, bridges and superstructures. [Reserved]
- §745.229 Certification of individuals and firms engaged in lead-based paint activities: public and commercial buildings, bridges and superstructures. [Reserved]
- § 745.230 Work practice standards for conducting lead-based paint activities: public and commercial buildings, bridges and superstructures. [Reserved]

§ 745.233 Lead-based paint activities requirements.

Lead-based paint activities, as defined in this part, shall only be conducted according to the procedures and work practice standards contained in §745.227 of this subpart. No individual or firm may offer to perform or perform any lead-based paint activity as defined in this part, unless certified to

perform that activity according to the procedures in §745.226.

§ 745.235 Enforcement.

- (a) Failure or refusal to comply with any requirement of §§ 745.225, 745.226, 745.227, or 745.233 is a prohibited act under sections 15 and 409 of TSCA (15 U.S.C. 2614, 2689).
- (b) Failure or refusal to establish, maintain, provide, copy, or permit access to records or reports as required by §§ 745.225, 745.226, or 745.227 is a prohibited act under sections 15 and 409 of TSCA (15 U.S.C. 2614, 2689).
- (c) Failure or refusal to permit entry or inspection as required by §745.237 and section 11 of TSCA (15 U.S.C. 2610) is a prohibited act under sections 15 and 409 of TSCA (15 U.S.C. 2614, 2689).
- (d) In addition to the above, any individual or firm that performs any of the following acts shall be deemed to have committed a prohibited act under sections 15 and 409 of TSCA (15 U.S.C. 2614, 2689). These include the following:
- (i) Obtaining certification through fraudulent representation;
- (ii) Failing to obtain certification from EPA and performing work requiring certification at a job site; or
- (iii) Fraudulently obtaining certification and engaging in any lead-based paint activities requiring certification.
- (e) Violators are subject to civil and criminal sanctions pursuant to section 16 of TSCA (15 U.S.C. 2615) for each violation.

§ 745.237 Inspections.

EPA may conduct reasonable inspections pursuant to the provisions of section 11 of TSCA (15 U.S.C. 2610) to ensure compliance with this subpart.

§ 745.238 Fees for accreditation and certification of lead-based paint activities.

- (a) *Purpose*. To establish and impose fees for certified individuals and firms engaged in lead-based paint activities and persons operating accredited training programs under section 402(a) of the Toxic Substances Control Act (TSCA).
- (b) *Persons who must pay fees.* Fees in accordance with paragraph (c) of this section must be paid by: